

### DATASHEET



## Horn<sup>™</sup> 5

### 5 GHz Beamwidth Horn Antenna

Models: Horn-5-30, Horn-5-45, Horn-5-60, and Horn-5-90

Isolation Antenna Horns for airFiber® LTU and airMAX®

Designed for Increased Co-Location Performance

**Dual-Linear Polarization** 





### **Overview**

**Application Example** 

**PtMP Client Links** 

Ubiquiti Networks launches a new family of beamwidth isolation horn antennas.

### **Modular Design**

With flexible sectorization for optional antenna beamwidths, the horn antennas are interchangeable and improve beam-shaping for specific deployment and environment needs. Sector horn antennas are designed to increase co-location performance without sacrificing gain.

### **Scalability**

There are two symmetrical horn antennas:

- · Horn-5-30: 30° beamwidth
- · Horn-5-45: 45° beamwidth

These models offer breakthrough scalability options for wireless systems. Unique beam performance and great co-location characteristics allow for a higher density of sectors than traditional sector technology.

#### **Enhanced Co-Location**

There are two asymmetrical horn antennas:

- Horn-5-60: 60° beamwidth
- · Horn-5-90: 90° beamwidth

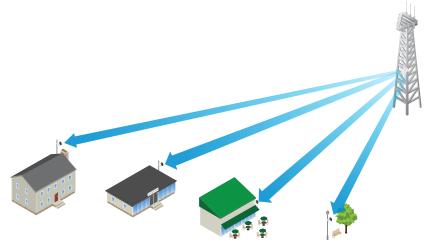
These models have naturally attenuated side lobes and extremely low back radiation. They offer best front-to-back ratio in the industry and the lowest side lobe radiation.

Asymmetrical horn antennas are ideal for cluster sector installations with high co-location requirements.

### Versatility

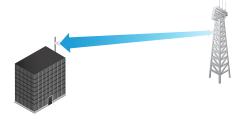
The horn antennas can be used with the following radios:

- airFiber LTU<sup>™</sup> AF-LTU
- IsoStation IS-5AC
- IsoStation IS-M5
- PrismStation PS-5AC



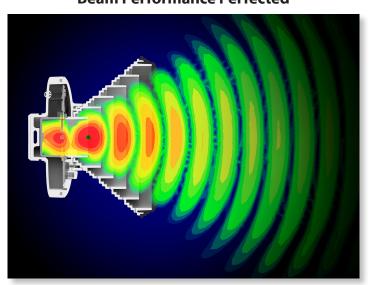
The PrismStation<sup>™</sup> 5AC (with a horn antenna) is used as an AP to communicate with the IsoStation<sup>™</sup> 5AC for each client in an airMAX PtMP (Point-to-MultiPoint) network.

#### **PtP Link**



Use an IsoStation 5AC on each side of a PtP (Point-to-Point) link.

### **Beam Performance Perfected**





### **Modular Design**

The horn antennas come with precise radiation angles for specific beam shaping, ranging from 30° to 90°, making them suitable for a wide range of installations.

- Horn designed for improved beam shaping
- Enhanced co-location performance
- · Single button release for ease of changing antennas

### **Model Comparison**



	Horn-5-30	Horn-5-45	Horn-5-60	Horn-5-90
Beamwidth	30°	45°	60°	90°
Gain	19 dBi	15.5 dBi	16 dBi	13 dBi



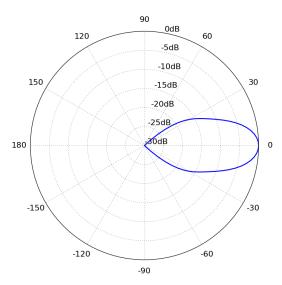
PS-5AC with Horn-5-45 Mounted on Pole



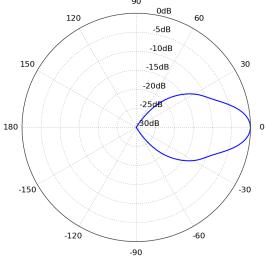
# Horn<sup>™</sup> 5 30 Specifications

Horn-5-30		
Dimensions	Ø 221.4 x 184.2 mm (8.71 x 7.3")	
Weight	1.1 kg (38.8 oz)	
Supported Frequency Range	5.15 - 5.85 GHz	
Gain	19 dBi	
HPOL Beamwidth	30°	
VPOL Beamwidth	30°	
Elevation Beamwidth	30°	
Maximum VSWR	1.7:1	
Wind Survivability	200 km/h (125 mph)	
Wind Loading	56 N @ 200 km/h (12.6 lbf @ 125 mph)	
Polarization	Dual-Linear	
Cross-Pol Isolation	17 dB	

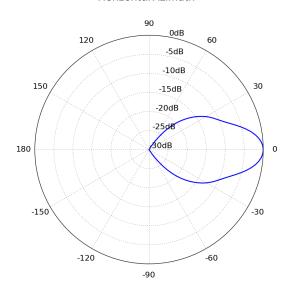




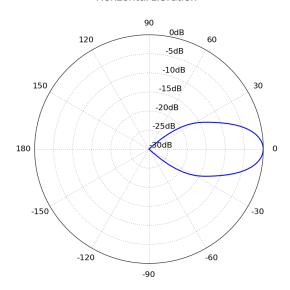
90 0dB 120 -5dB



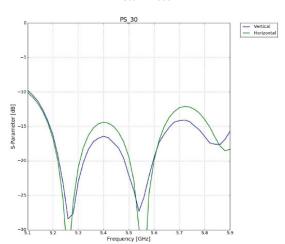
Horizontal Azimuth



Horizontal Elevation



### Return Loss

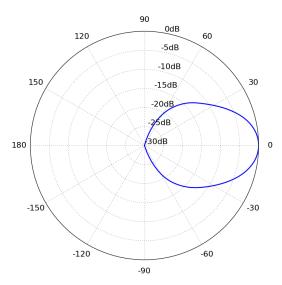




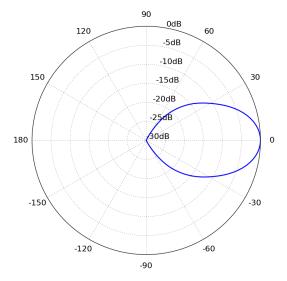
# Horn<sup>™</sup> 5 45 Specifications

Horn-5-45		
Dimensions	Ø 175 x 96 mm (6.9 x 3.78")	
Weight	1.34 kg (47.23 oz)	
Supported Frequency Range	5.15 - 5.85 GHz	
Gain	15.5 dBi	
HPOL Beamwidth	45°	
VPOL Beamwidth	45°	
Elevation Beamwidth	45°	
Maximum VSWR	1.7:1	
Wind Survivability	200 km/h (125 mph)	
Wind Loading	56 N @ 200 km/h (12.6 lbf @ 125 mph)	
Polarization	Dual-Linear	
Cross-Pol Isolation	17 dB	

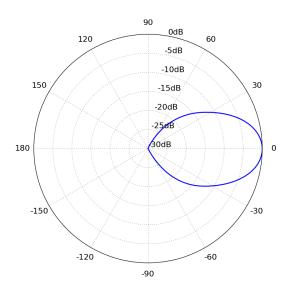




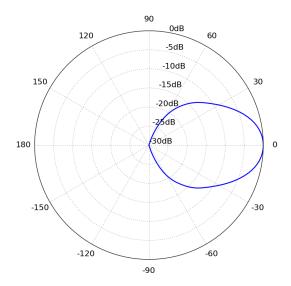
Vertical Elevation



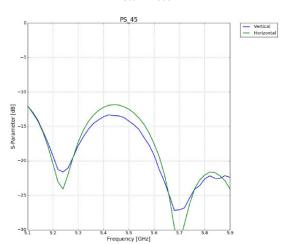
Horizontal Azimuth



Horizontal Elevation



### Return Loss

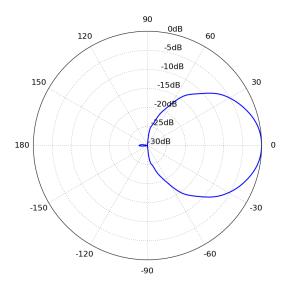


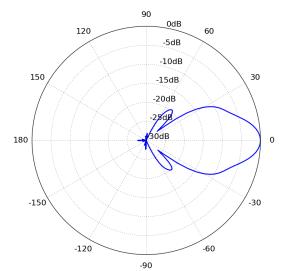


# Horn<sup>™</sup> 5 60 Specifications

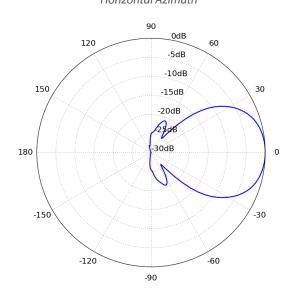
Horn-5-60		
Dimensions	161.6 x 173.3 x 170.9 mm (6.4 x 6.82 x 6.73")	
Weight	720g (25.39 oz)	
Supported Frequency Range	5.15 - 5.85 GHz	
Gain	16 dBi	
HPOL Beamwidth	60°	
VPOL Beamwidth	60°	
Elevation Beamwidth	30°	
Maximum VSWR	2:1	
Wind Survivability	200 km/h (125 mph)	
Wind Loading	50 N @ 200 km/h (11.2 lbf @ 125 mph)	
Polarization	Dual-Linear	
Cross-Pol Isolation	17 dB	



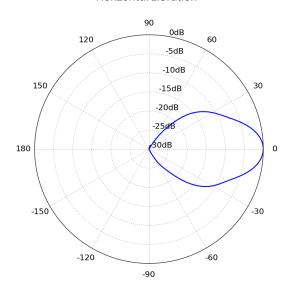




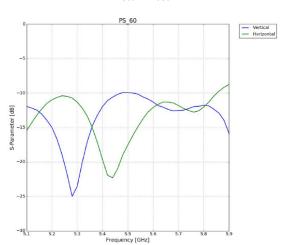
### Horizontal Azimuth



### Horizontal Elevation



### Return Loss



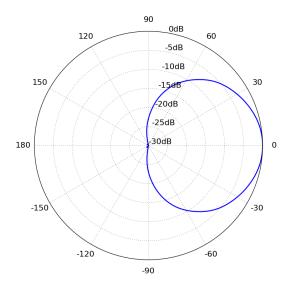


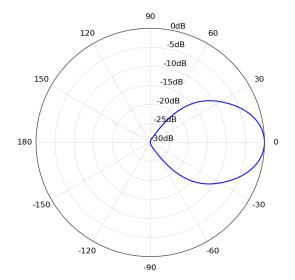
# Horn 5 90 Specifications

Horn-5-90		
Dimensions	152.1 x 186.8 x 113.2 mm (5.99 x 7.35 x 4.46")	
Weight	920 g (32.45 oz)	
Supported Frequency Range	5.15 - 5.85 GHz	
Gain	13 dBi	
HPOL Beamwidth	90°	
VPOL Beamwidth	90°	
Elevation Beamwidth	45°	
Maximum VSWR	2:1	
Wind Survivability	200 km/h (125 mph)	
Wind Loading	46 N @ 200 km/h (10.3 lbf @ 125 mph)	
Polarization	Dual-Linear	
Cross-Pol Isolation	17 dB	

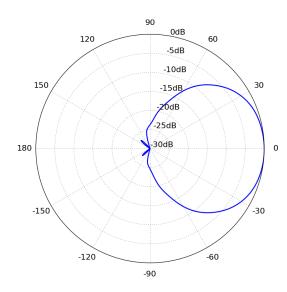




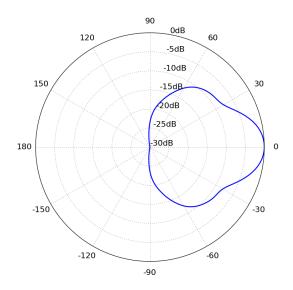




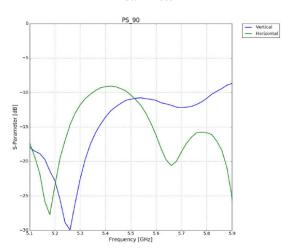
#### Horizontal Azimuth



### Horizontal Elevation



#### Return Loss



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